

FM/AM TUNER

KT-595

INSTRUCTION MANUAL

KENWOOD CORPORATION

Unpacking

Unpack the unit carefully and make sure that all accessories are put aside so they will not be lost.

Examine the unit for any possibility of shipping damage. If your unit is damaged or fails to operate, notify your dealer immediately. If your unit was shipped to you directly, notify the shipping company without delay. Only the consignee (the person or company receiving the unit) can file a claim against the carrier for shipping damage.

We recommend that you retain the original carton and packing materials for use should you transport or ship the unit in the future.

For your records

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your dealer for information or service on this product.

Model _____ Serial Number _____

Accessories

Audio cord 1



AC plug adaptor 1
(Except for U.S.A.,
Mexico, Canada and
Australia.)



System control cord 1



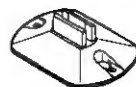
FM indoor antenna 1



AM loop antenna 1



Loop antenna stand 1



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Caution: Read the pages marked carefully to ensure safe operation.

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Special features



Caution: Read this page carefully to ensure safe operation.

- A total of 30 AM and FM stations can be preset (put into memory).
- Any station can be selected by simply pressing the appropriate preset number key.
- The preset (memory) contents can be easily confirmed, and the preset station can be selected.

Before applying power

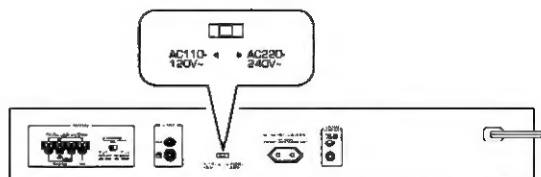
Units are designed for operation as follows.

U.S.A. and Canada 120 V only
Australia 240 V only
Europe and U.K. 230 V only
* Other countries 110-120 / 220-240 V switchable

* AC voltage selection

The AC voltage selector switch on the rear panel is set to the voltage that prevails in the area to which the unit is shipped. Before connecting the power cord to your AC outlet, make sure that the setting position of this switch matches your line voltage. If not, it must be set to your voltage in accordance with the following direction.

AC voltage selector switch



Move switch lever to match your line voltage with a small screwdriver or other pointed tool.

Note:

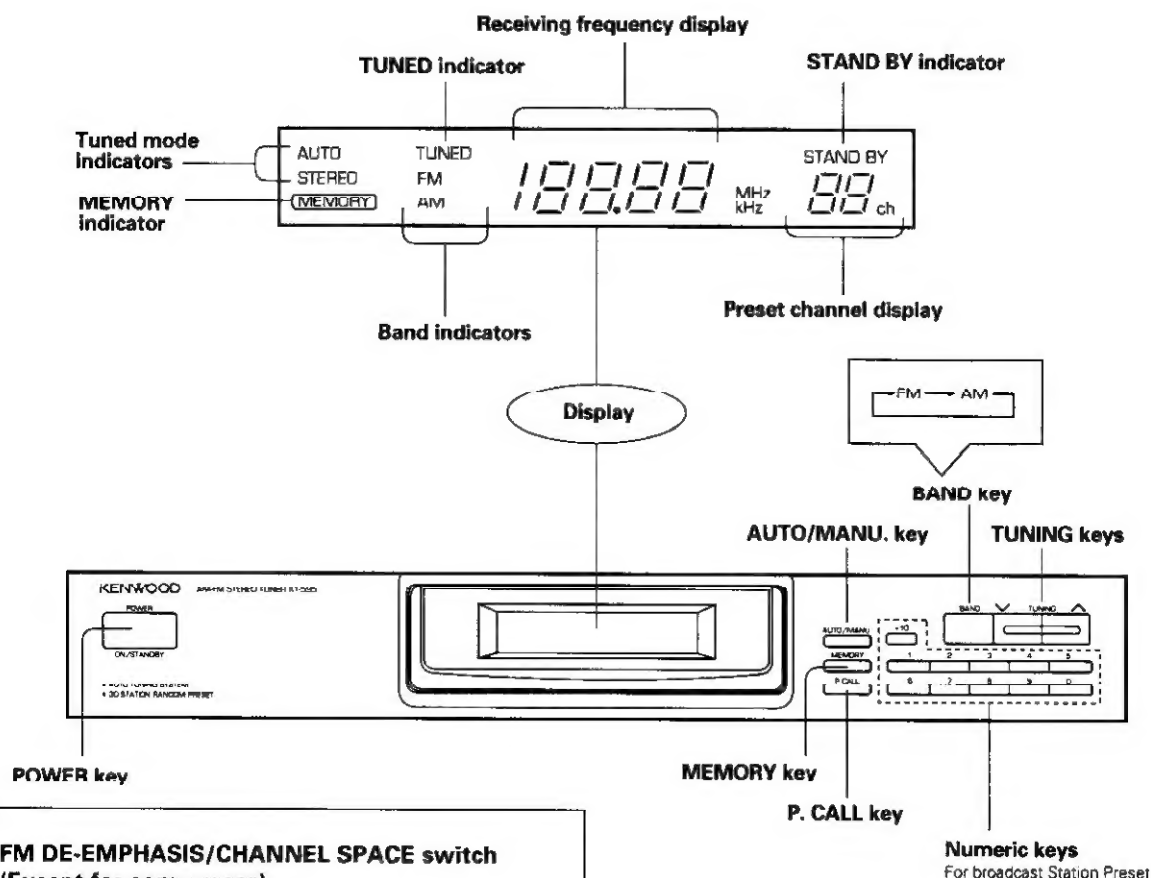
Our warranty does not cover damage caused by excessive line voltage due to improper setting of the AC voltage selector switch.

Safety precautions

WARNING : TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN		CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
	THE LIGHTNING FLASH WITH ARROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.		
	THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.		

Controls and indicators



FM DE-EMPHASIS/CHANNEL SPACE switch (Except for some areas)

The FM DE-EMPHASIS/CHANNEL SPACE switch on the rear panel is set to the correct setting that prevails in the area to which the unit is shipped. However, if the FM DE-EMPHASIS/CHANNEL SPACE setting is not matched to the area where the unit is to be used; for instance, when you moved from area 1 to area 2 or vice versa, desired reception of AM/FM broadcasts is not expected. In this case, change the FM DE-EMPHASIS/CHANNEL SPACE setting in accordance with the area corresponding to the table. The FM DE-EMPHASIS is switched over at the same time.

- When changing the setting of the FM DE-EMPHASIS/CHANNEL SPACE switch, first disconnect the power cord, then reset the channel space switch, connect the power cord again, and turn the power on.



Area	CHANNEL SPACE freq.	FM DE-EMPHASIS
1. U.S.A., Canada, and South american countries	FM: 100 kHz AM: 10 kHz	75 μ s
2. Other countries	FM: 50 kHz AM: 9 kHz	50 μ s

STANDBY mode of POWER switch

When the power cord of this system is plugged into an AC outlet, the STANDBY indicator lights up even when the POWER switch is OFF. This indicates that a small amount of current is being supplied to the unit to back up the memory contents. This mode is referred to as the Standby mode.

Last channel memory

When the power is turned ON or the BAND key is pressed to switch the band (FM, AM), the last station previously received is automatically tuned in.

Memory backup

Even if the power cord is unplugged from the AC outlet, the pre-set memory contents will be backed up for three days.

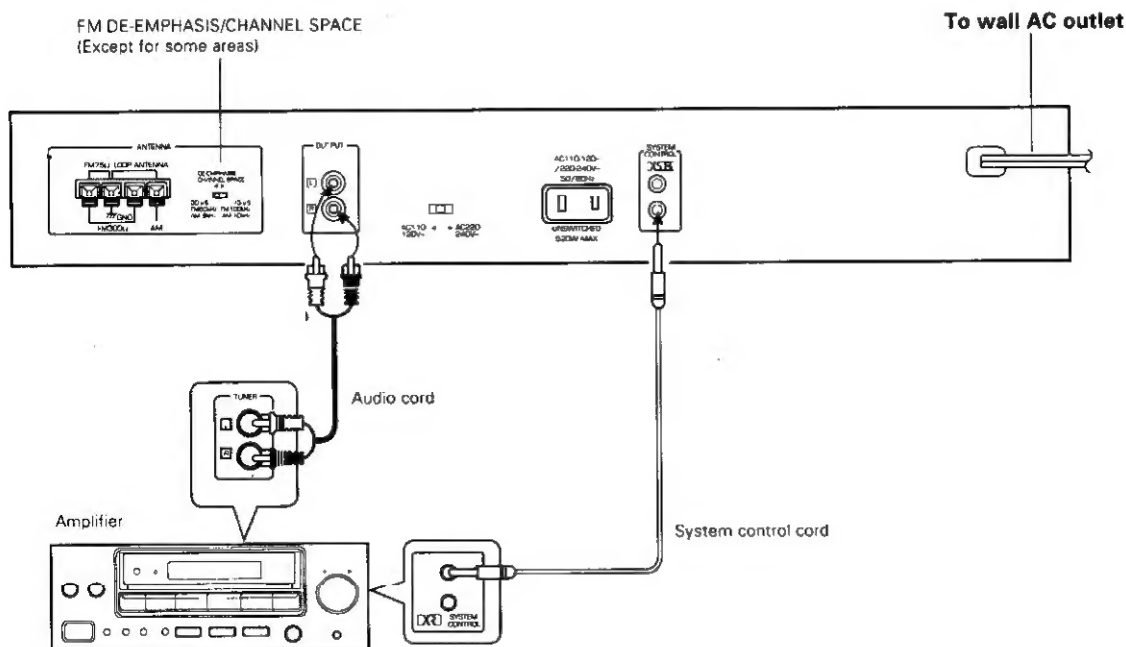
System connections

Make connections as shown below. When connecting the related system components, refer also to the instruction manuals of the related components.

Do not plug in the power lead until all connections are completed.

Malfunction of microcomputer

If operation is not possible or erroneous display appears even though all connections have been made properly, reset the microcomputer referring to "In case of difficulty".



AC outlets on the rear panel

Unit destination	Shape of the AC outlet
For U.S.A. and Canada: UNSWITCHED 700W 5.8A MAX.	
For U.S. military: UNSWITCHED 520W MAX.	
For Australia: UNSWITCHED 520W MAX.	
For other countries: UNSWITCHED 520W MAX.	

Notes:

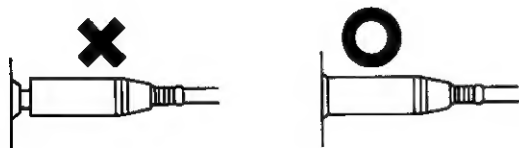
1. Connect all cords firmly. If connections are loose, there could be loss of sound or noise produced.
2. When plugging and unplugging connection cords, be sure to first remove the power cord from the AC outlet. Plugging / unplugging connection cords without removal of the power cord can cause malfunctions or damage to the unit.
3. Do not connect up a power source which is larger than that indicated on the socket at the rear of the unit.

System control connection

When connected to an amplifier having KENWOOD SYSTEM CONTROL terminals, system operation such as remote control is made possible. For details, refer to the instruction manual of the amplifier or receiver.

If your amplifier or receiver is not equipped with the SYSTEM CONTROL terminals, do not connect anything to any SYSTEM CONTROL terminal.

Do not connect the unit in any system configuration other than specified.



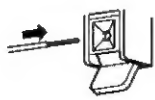
- Be sure to insert the system control cord plugs fully into the SYSTEM CONTROL terminals.
- If the system control cord and audio cords are not connected properly, the automatic system governing remote control and system functions will not operate.

Connection method to each antenna terminal

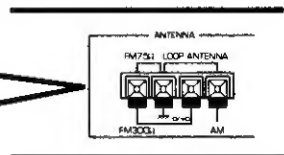
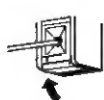
① Push lever.



② Insert cord.

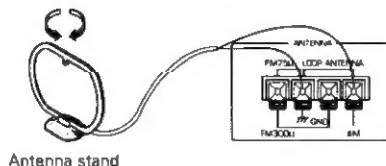


③ Return lever.



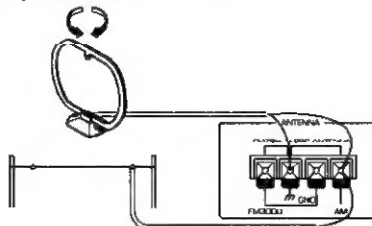
■ AM loop antenna connection

The supplied antenna is for indoor use. Place it as far as possible from the main system, TV set, speaker cords and power cord, and set it to a direction which provides the best reception.



■ AM outdoor antenna connection

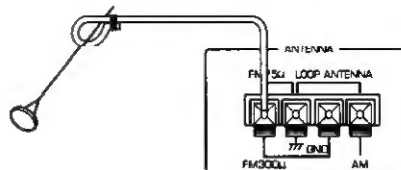
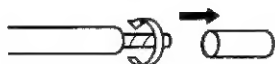
If the reception is poor when the AM loop antenna is used, distribute a vinyl-coated wire of more than 6 meters outdoors, without disconnecting the loop antenna.



■ FM indoor antenna connection

The supplied antenna is for indoor use. For stable reception, remove the indoor antenna after installing an outdoor antenna as soon as possible.

- ① Remove insulation from wire tip and twist wire tightly.
- ② Find the position that provides best reception.
- ③ Fix the end.

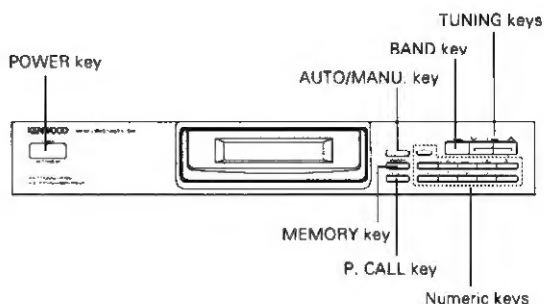


■ FM outdoor antenna connection

It is recommended to install an exclusive FM outdoor antenna to capture FM broadcast with high sound quality. Use a coaxial cable for the connection between the outdoor antenna and FM ANTENNA terminal on the rear panel. For the connection between the coaxial cable and FM ANTENNA terminal, please refer to the illustration.

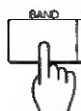


Reception of radio broadcast

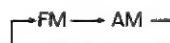


■ Receiving broadcast stations and storing them in memory (preset operation)

1 Select the broadcast band.



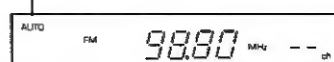
The bands are switched as follows every time the **BAND** key is pressed.



2 Select the tuning mode.



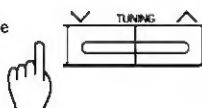
AUTO indicator



Press the key to select the auto (AUTO lighted) or manual (not lighted) mode.

3 Tune the desired station.

To decrease frequency



To increase frequency



Auto tuning mode

Press once.
(Tuning stops automatically when a station is received.)

Manual tuning mode

Press repeatedly, or press and hold, until the desired station is received.

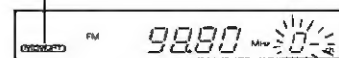
- The TUNED indicator lights up when a station is received.
- Use manual tuning mode when the radio wave is weak and noisy. At this time, the stereo FM broadcast is received in monaural mode.

4 Store the station in preset memory.

① Press the MEMORY key.



MEMORY lights up for approx. 5 sec.



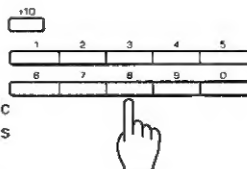
- Proceed the steps ② while the **MEMORY** indicator is lighted.

② Press the numeric key.

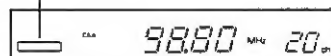
Examples of input

To select preset No. 15: **+10** **5**

To select preset No. 20: **+10** **+10** **0**



MEMORY goes off.

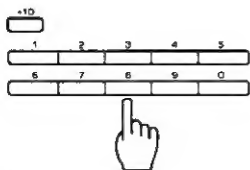


- When a station has previously been preset under the numeric key pressed, the newly preset station replaces the previous station.
- When preset is to be continued, repeat steps 1 to 4.
- Up to 30 broadcast stations can be preset regardless of the broadcasting bands.

■ Receiving a preset station

Select the desired station.

Press the numeric key under which the station is preset.



Examples of input

To select preset No. 3: **3**
 To select preset No. 10: **+10 0**
 To select preset No. 23: **+10 +10 3**
 To select preset No. 30: **+10 +10 +10 0**

- The frequency of the station received will be displayed.

■ Listening to all preset stations in sequence (PRESET CALL)

Press the P.CALL key.



- With the key on the tuner main unit, preset stations are received in order to 1 → 2 → 3 ... 10 ... 20 ... 30 → 1 ..., every time the key is pressed.
- When a key is held depressed, the preset station are received in sequence at 0.5-second intervals. The station being received when the key is released will continue to be received.

In case of difficulty

What appears to be a malfunction may not always be serious. If your unit should not perform as expected, consult the table below to see if the problem can be corrected before seeking help from your dealer or service representative.

Symptom	Cause	Remedy
Power cannot be tuned ON.	<ul style="list-style-type: none"> • The power cord is disconnected from the wall AC outlet. 	<ul style="list-style-type: none"> • Insert the power cord securely into the wall AC outlet.
Radio stations cannot be received.	<ul style="list-style-type: none"> • No antenna is connected. • The broadcast band is not set properly. • The frequency of the desired station is not tuned. 	<ul style="list-style-type: none"> • Connect an antenna. • Set the broadcast band properly. • Tune the frequency of the desired station.
A station which was preset cannot be received by pressing the corresponding numeric key.	<ul style="list-style-type: none"> • The preset station belongs to a frequency that cannot be received. • The preset memory was cleared because the power cord had been unplugged for a long period of time. 	<ul style="list-style-type: none"> • Preset a station with a receivable frequency. • Preset the station again.
Interference.	<ul style="list-style-type: none"> • Noise due to ignition noise of an automobile. • Noise due to an influence from an electric appliance. • Noise due to a nearby TV set. 	<ul style="list-style-type: none"> • Install the outdoor antenna apart from the road. • Turn off the power of the appliance. • Install the system more apart from the TV set.

Operation to reset

The microcomputer may fall into malfunction (impossibility to operate, erroneous display, etc.) when the power cord is unplugged while power is ON or due to an external factor. In this case, execute the following procedure to reset the microcomputer and return it to normal condition.

Unplug the power cord from the power socket and, while holding the MEMORY key depressed, plug the power cord into the socket again.

- Please note that resetting the microcomputer clears the contents stored in it returns it to the condition when it left the factory.

Notes:

1. This system is microprocessor-controlled, so malfunction may occur due to external noise or interference noise. In such a case, unplug the power cord, plug it and turn power on again.
2. Do not use contact cleaners because it could cause a malfunction. Be specially careful against contact cleaners containing oil, for they may deform the plastic components.

Specifications



Caution : Read this page carefully to ensure safe operation.

FM tuner section

Tuning frequency range	87.5 MHz ~ 108 MHz
Usable sensitivity (MONO at 75Ω)	1.2 μV / 13.2 dBf
Total harmonic distortion (at 1kHz)	
MONO	0.6 % (65 dBf input)
STEREO	0.7 % (65 dBf input)
Signal to noise ratio (at 1kHz)	
MONO	75 dB (65 dBf input)
STEREO	68 dB (65 dBf input)
Stereo separation	
1 kHz	40 dB
Capture ratio (WIDE)	2.0 dB
Selectivity (+400 kHz)	50 dB
Image rejection ratio (at 98 MHz)	50 dB
IF rejection ratio (at 98 MHz)	78 dB
Spurious rejection ratio (at 98 MHz)	80 dB
AM suppression ratio	37 dB
Frequency response (30 Hz~15 kHz)	+0.5 dB, -3 dB
Output level / impedance (at 1 kHz, 75 kHz dev)	
Fixed	0.6 V / 3.3 kΩ

AM tuner section

Tuning frequency range	
9 kHz step	531 kHz ~ 1.602 kHz
10 kHz step	530 kHz ~ 1.610 kHz or 530 kHz ~ 1.700 kHz
Usable sensitivity	12 μV / (500 μV/m)
Signal to noise ratio (at 30 % mod. 1 mV input)	48 dB
Total harmonic distortion	0.7 %
Image rejection ratio	30 dB
Selectivity	30 dB
Output level / impedance (at 30 % mod. 1mV input)	
.....	0.18V / 3.3kΩ
General	
Power consumption	10W
Dimensions	W : 440 mm (17 - 5/16") H : 75 mm (2 - 15/16") D : 245 mm (9 - 5/8")
Weight (Net)	2.2 kg (4.8 lb)

Note:
KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice

For the U.S.A.

Note to CATV system installer:

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

For the U.S.A. FCC WARNING:

This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

Note:

This equipment has been tested and found to comply with limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment may cause harmful interference to radio communications, if it is not installed and used in accordance with the instructions. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.